



Patent  
Attorney's Docket No. 005950-790

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of ) **MAIL STOP AFTER FINAL**  
Lucy M. Bull et al. )  
Application No.: 10/613,422 ) Group Art Unit: 1764  
Filed: July 2, 2003 ) Examiner: JOHN CHRISTOPHER  
For: ACID TREATMENT OF A FISCHER- ) DOUGLAS  
TROPSCH DERIVED ) Confirmation No.: 5145  
HYDROCARBON STREAM )  
)  
)

**DECLARATION UNDER 37 C.F.R. § 1.132**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

I, Richard O. Moore, Jr., declare as follows:

1. I received a Bachelor of Science in Chemical Engineering (Cum Laude) in 1978 and a Masters in Chemical Engineering in 1979 from Rice University, in Houston, Texas. I received the AIChE Outstanding Graduating Student Award on graduation from my Masters degree.
2. I am a Registered Professional Engineer, State of California and carry the AIChE Professional Development Recognition Certificate.
3. I am employed as a Senior Staff Engineer for Chevron Global Downstream LLC. I have been employed as a Chemical Engineer in various capacities with Chevron for 27 years.
4. I am an inventor or co-inventor of 16 U.S. patents and 1 European patent in Hydroprocessing Technology.

5. I am one of the named inventors of U.S. Application Serial No. 10/613,422, entitled "Acid Treatment of a Fischer-Tropsch Derived Hydrocarbon Stream".

6. I am familiar with the issues raised in the Office Actions dated February 2, 2006 and November 2, 2006, in the above-referenced application. In the Office Actions, claims 1, 2, 5-18, 21, 25-27, 30, and 31 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 2,877,257 ("Cain") in view of U.S. Publication No. 2002/0173556 ("Moore") and Claims 19, 20, 22, 28, 29, 32, and 33 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Cain in view of Moore and further in view of U.S. Patent No. 6,476,086 ("Zhou").

7. I am one of the named inventors of U.S. Publication No. 2002/0173556 ("Moore") cited in the Office Actions dated February 2, 2006 and November 2, 2006.

8. I have carefully reviewed Cain, Moore, and Zhou. I respectfully, but strongly, disagree with the Examiner's conclusions regarding Cain and Moore.

9. The present invention relates to a process for removing aluminum-containing contaminants from a Fischer Tropsh derived hydrocarbon stream which is produced using a cobalt catalyst.

10. Cain relates to a process for the purification of hydrocarbon solutions containing dissolved or occluded iron contaminants. Cain discloses that the contaminated hydrocarbon products can be produced by Fischer Tröpsch synthesis using a promoted iron catalyst. Cain discloses that the product produced from such a process contains dissolved or occluded metal contaminants such as iron or iron compounds.

11. Accordingly, Cain is attempting to address the problem of removal of iron contaminants from hydrocarbon products. Iron contamination is particularly troublesome in Cain and needs to be removed because of the detrimental effect it has on the extraction process used therein.

12. Moore is directed to a method for preparing liquid fuel in a hydrocarbon synthesis process, and more specifically for preparing a stabilized mixed fuel from a carbon source at a remote site, and tailoring one or more finished fuel products from the mixed fuel in order to meet local fuel requirements at a market site. Moore discloses cobalt Fischer Tropsch catalysts.

13. Cain does not mention or make any suggestion of aluminum and/or any aluminum contamination.

14. It is well known to those of skill in the art that Cain's iron Fischer Tropsch catalysts does not contain aluminum. It is well known to those of skill in the art that iron Fischer Tropsch catalysts are generally bulk iron materials, without a metal oxide support.

15. Accordingly, one of skill in the art experiencing an aluminum contamination problem, as in the present invention, would not turn to Cain for a possible solution.

16. Cain does not mention or make any suggestion of a cobalt catalyst.

17. There is no disclosure or suggestion in Moore that a cobalt catalyst would cause any contamination.

18. There is no disclosure or suggestion in Cain or Moore that a cobalt catalyst would cause any contamination, much less contamination as experienced in Cain. Moreover, there is no disclosure or suggestion in Cain or Moore that such contamination would have the same detrimental effect on the extraction process disclosed in Cain.

19. Accordingly, there is no disclosure or suggestion in Cain or Moore that a metal removal process would be required if a cobalt catalyst, as disclosed in Moore, were used rather than the iron catalyst of Cain.

20. The present invention relates to removal of soluble and very finely divided particulate aluminum contaminants. One of skill in the art would readily recognize that a chemical reaction would be required to produce aluminum contaminants with these physical properties.

21. In the presently claimed process, the aluminum contaminants are produced using a cobalt catalyst. One of skill in the art readily understands that a cobalt catalyst, when used in a Fischer Tropsch process, produces a different distribution of products and contaminants than using an iron catalyst.

22. Therefore, one of skill in the art when using a Fischer Tropsch process including a cobalt catalyst as disclosed in Moore, would not look to Cain for a purification process to solve a contamination problem associated with the use of the cobalt catalyst.

23. I hereby declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be

true. I understand that willful false statements and the like are punishable by fine or imprisonment, or both under 18 United States Code section 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Richard O. Moore, Jr.

Richard O. Moore, Jr.

March 1, 2007

Date